

Work Order ID 84482

84482

Page 1

May-14-12 7:08:56 PM

Item ID: D135-751-011

Accept

M9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Skidtube Installation

Start Date: 14/05/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 23/05/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/05/14 Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D3492	C
-------	---

D3507	Rev C
-------	-------

100.

0.00

100

DOCUMENT CONTROL

DC

0.00

Memo

Document Control

Photocopy bluefile & type labels per PPP D135-751-011

CHG001

Sidow/20

MLJ 12-6-19

H/FORM

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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N900040100

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Revision ID:

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Start Date: 14/05/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 23/05/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
120	Skidtubes					1	0		BE12/05/30
Skidtubes	Memo	0.00							
Skidtubes	1-Cut Aft end as per dwg D3507								
	2-Deburr ends								
	3-Drill Aft & Fwd Cap holes using DT8678 & DT8901								
	4-Locate DT8870 & Drill Ground wire hole on top of Tube.								
	6-Locate DT8870 with #30 cleco in Ground wire hole, then Pilot Drill all X-Bolt holes using #30" drill. ****DO NOT OPEN AFT CAP HOLES****								
	7-Open crossbolt holes to 0.3125" (3 per side). Drill pilot holes for wearplates using Dt8868, Use DT8892 FOR REAR WEARPLATE HOLES.								
	8-Open six rear wearplate holes using DT8892. Open holes to 0.297"								
	9-Open Aft & Fwd Cap holes using .208" drill.								
	10-Bore out aft end of tube as per Dwg D3507 & Detail "B".								
	11-Open ground wire hole .297" section E-E								
	12- Section G-G holes must be laid out manually, open to #30.								
	13-Deburr holes.								

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Customer:

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Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.00

Quality Control

150

Chemical Conversion Coat per QSI005 4.1

0.00

150

HandFinish

Memo

0.00

Hand Finishing

160

QC7-Inspect Chemical Conversion Coat

0.00

160

QC

Memo

0.00

Quality Control

1 7/6 12-5-30

0 SAD 12-05-30

W/O:		WORK ORDER CHANGES					
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Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

0.00

170

Skidtubes

0.00

Skidtubes

Memo

1-Open X-Bolt holes to .375"(2Places) & .500"(2Places) as per Dwg D3507 and Detail "F"

2-Counter Sink X-BOLT holes as per Dwg D3507

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3507 & QSI 015

A/R 241 Sike Flex Batch: m12/221Exp Date: 12-1-4start time: 8:30end time: 12/06/01

5-Weld x-bolt (D3504-1/-3) spacers as per Dwg D3507 and Detail C-C & D-D.

A/R AL ROD

Batch: m12/064

6-Grind welds flush

7-Drill Rivet Holes as per Dwg D3507 Using Dt8871A&B

8-Deburr Rivet holes.

CF 125-31

BE 12/06/01

BE 12/06/06

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1

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Required Date: 23/05/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC10- Inspect visual per QSI004- ground welds

0.00

180

QC

Memo

0.00

Quality Control

190

Skidtubes

0.00

190

Skidtubes

Memo

0.00

Skidtubes

1-Rivet D3506-1/-3 as per Dwg D3507.

200

QC5- Inspect part completeness to step on W/O

0.00

200

QC

Memo

0.00

Quality Control

Scrap

Scrap

1 0 BE 2/06/06

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Required Date: 23/05/2012 Req'd Qty: 1.00

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

Pressure Wash per QSI005 4.3

0.00

210

HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

1x d JH 12/06/06

220

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

220

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

2:15
320°F
2:45

1x d M-F 12/06/06

230

QC3- Inspect Part Finish

0.00

230

QC

Memo

0.00

Quality Control

1x d JH 12/06/06

M121134

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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

260

0.00

260

HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1 8 2P 12/06/08

1- Install Wearplate & Ground Wire inserts as per Dwg D3507.

1-Inspect for Foreign objects

2-Install Fwd & Aft caps as per Dwg D3507 And Detail "A" & "B"

A/R 241 Sika Flex Batch: 121 409
Exp Date: 13/07

3-Install Wearplates as per Dwg D3507,

Note: Install (1) Bolt and (1) washer on Ground Wire insert on top of tube

Do not Install Screws where indicated on Dwg(Note #6)

A/R 241 Sika Flex Batch: 121 409
Exp Date: 13/07

4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: 114 596

5- Wing Walk as per Dwg D3507 and QSI 005 4.4

Batch: 121 613

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Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	QC5- Inspect part completeness to step on W/O	0.00							
270									
QC	Memo	0.00							
Quality Control									
280	Pick Kit	0.00							
280									
Packaging	Memo	0.00							
Packaging									
290	QC4- 100% Inspect kits for completeness	0.00							
290									
QC	Memo	0.00							
Quality Control									

84482.

W/O:		WORK ORDER CHANGES					
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NS1

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Customer:

Reference:

Run Start

NR1

Approvals: Process Plan:

Date:

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

300

0.00

300

Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D135-751-011

Location:

PPP Rev:

B

310

0.00

310

QC

QC21- Final Inspection - Work Order Release

Memo

0.00

Quality Control

X

12-6-21

12/6/22

12-06-21

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Page 1

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84482

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:A06-06-21New Issue JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC verified DD
 IPP Rev E 10.02.22 per pAR 09-043 EC verified by: DD IPP Rev:F
 10.06.09 remove seq110 DD verf:EC IPP Rev G 10.09.17
 added D3507-1-bent EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

ALS7-1032-130

Purchased

No

Each

2,208.000

38

AI S7-1032-130

**

38

28

12/06/07

Insert

Location

Loc Qty

Loc Code

ST280

121269

123

117717

27

118966

22

119775

74

ST282

2085

119530

73

120181

12

121444

2000

D3507-1-BENT

Manufactured

No

120

Each

1.0000

1

1

D3507-1-BENT

**

Skidtube Assembly EC135

Location

Loc Qty

Loc Code

LG

1

77441

1

BE12/05/23
 B 83303 * 1

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Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

D3504-1 Manufactured No

170 Each 26.0000 2 2

D3504-1

Crossbolt Spacer

**

BEA/06/01

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	5	
82725	5	<u>2</u>
LG001	21	
53742	2	
75240	19	

D3504-3 Manufactured No

170 Each 25.0000 1 1

D3504-3

Crossbolt Spacer

**

BEA/06/01

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	14	
82726	14	<u>1</u>
LG001	11	
53743	11	

D3504-5 Manufactured No

170 Each 19.0000 2 2

D3504-5

Crossbolt Spacer

**

BEA/06/01

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	19	
76239	7	<u>2</u>
82727	12	

D3505-1 Manufactured No

170 Each 3.0000 1 1

D3505-1

Web

**

CF 125.31

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	3	
75211	1	
83547	2	<u>2</u>

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Shop Packet Print

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D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

D3506-1 Manufactured No 190 Each 27.0000 4 4

D3506-1

Doubler

**

Location Loc Qty Loc Code

ST051 27

75090 27

4

BE12/06/06

D3506-3 Manufactured No 190 Each 49.0000 2 2

D3506-3

Doubler

**

Location Loc Qty Loc Code

ST051 49

51790 49

2

BE12/06/06

MS20601-AD4W3 Purchased No 190 Each 2,019.000 12 12

MS20601-AD4W3

Rivet

**

Location Loc Qty Loc Code

ST321 2019

114538 2019

12

BE12/06/06

ALS4-1032-225 Purchased No 260 Each 920.0000 1 1

ALS4-1032-225

Insert

**

Location Loc Qty Loc Code

ST281 897

108696 146

110768 62

118386 55

118966 68

121269 ✓ 566

ST282 23

120410 10

120451 13

1

Ⓟ

12/06/07

May-14-12 1:09:00 PM

Shop Packet Print

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Parent Item Name: Skidtube Installation

84482

D135-751-011

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

260

Each

1,969.000

31

31

AN3C4A

BOLT

**

31

28 12/06/07

Location

Loc Qty

Loc Code

ST350

1969

120187

63

120521

28

120769

38

121205

1000

121556 ✓

840

AN3C5A

Purchased

No

260

Each

1,398.000

2

2

AN3C5A

Bolt

**

2

28 12/06/07

Location

Loc Qty

Loc Code

FP001

7

115835

7

ST350

1391

116419

28

117343

13

117764

7

117872

2

119749

23

120423

28

121068

12

121255

500

121444 ✓

278

121708

500

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Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

May-14-12 1:09:00 PM

Page 5

Work Order ID: 84482

84482

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

AN526C1032R10

Purchased

No

260

Each

203.0000

2

2

AN526C1032R10

Screw

**

2 (2P) 12/06/07

Location

Loc Qty

Loc Code

FP002

71

108062 ✓

71

ST348

132

110049

32

114494

100

AN960C10L

* NAS1149C0332 ✓
R

Purchased

No

260

Each

0.0000

33

33

***AN960C10L ***

washer

D2965

Manufactured

No

260

Each

55.0000

1

1

D2965

Cap, 105 Skidtube

**

33 (2P) 12/06/07

**

1 (2P) 12/06/07

Location

Loc Qty

Loc Code

FP002

55

71371

8

80089 ✓

47

D2965-3

Manufactured

No

260

Each

4.0000

1

1

D2965-3

Cap

**

1 (2P) 12/06/07

Location

Loc Qty

Loc Code

FP002

4

50560

1

75254

3

May-14-12 1:09:00 PM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

May-14-12 1:09:00 PM

Work Order ID: 84482

84482

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

D3492-1

Manufactured No

260

Each

265.0000

4

4

D3492-1

Plug

**

4

(SP)

12/06/07

Location

Loc Qty

Loc Code

FP002

242

69531

8

74444

2

76235

4

83259 ✓

228

FP-A

23

83098

23

D3492-3

Manufactured No

260

Each

175.0000

4

4

D3492-3

Plug

**

4

(SP)

12/06/07

Location

Loc Qty

Loc Code

FP-A

175

81967

5

83099 ✓

48

83529

122

D3492-7

Manufactured No

260

Each

24.0000

2

2

D3492-7

Plug

**

2

(SP)

12/06/07

Location

Loc Qty

Loc Code

FP002

24

71881

2

77222 ✓

22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

May-14-12 1:09:00 PM

Page 7

Work Order ID: 84482

84482

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

D3508-1

Manufactured No

260 Each

7.0000

1 1

D3508-1

Wearplate

**

1 (2P) 12/06/07



Location

FP002

85407 ✓
72933 ~~8047~~

Loc Qty

7

7

Loc Code

D3508-3

Manufactured No

260 Each

8.0000

1 1

D3508-3

Wearplate

**

1 (2P) 12/06/07

Location

FP001

38527 ✓
81347 ✓

Loc Qty

8

1

7

Loc Code

D3508-5

Manufactured No

260 Each

11.0000

1 1

D3508-5

Wearplate

**

1 (2P) 12/06/07

Location

FP001

71688 ✓
72416

Loc Qty

11

3

8

Loc Code

D3508-7

Manufactured No

260 Each

8.0000

1 1

D3508-7

Wearplate

**

1 (2P) 12/06/07

Location

FP001

76265 ✓

Loc Qty

8

8

Loc Code

May-14-12 1:09:01 PM

Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

Page 8

May-14-12 1:09:01 PM

Work Order ID: 84482

84482

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

D3558-1 Manufactured No

260 Each 5.0000 1 1

D3558-1

Gasket

**

1 (2P) 12/06/07

Location

Loc Qty

Loc Code

FP002

84482 ✓

5

50925

1

73561 ✓

4

D3558-3 Manufactured No

260 Each 8.0000 1 1

D3558-3

Gasket

**

1 (2P) 12/06/07

Location

Loc Qty

Loc Code

FP

7

82312 ✓

7

FP002

1

71651

1

D3558-5 Manufactured No

260 Each 7.0000 1 1

D3558-5

Gasket

**

1 (2P) 12/06/07

Location

Loc Qty

Loc Code

FP002

7

75255 ✓

7

D3558-7 Manufactured No

260 Each 5.0000 1 1

D3558-7

Gasket

**

1 (2P) 12/06/07

Location

Loc Qty

Loc Code

FP002

5

75249 ✓

5

May-14-12 1:09:01 PM

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Page 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Picklist Print

May-14-12 1:09:01 PM

Work Order ID: 84482

84482

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-007

Purchased

No

260

Each

256.0000

2

2

NAS1611-007

O-RING

**

2

(2P)

12/06/07

Location

Loc Qty

Loc Code

FP001

256

103697 ✓

256

NAS1611-010

Purchased

No

260

Each

188.0000

4

4

NAS1611-010

O-RING

**

4

(2P)

12/06/07

Location

Loc Qty

Loc Code

FP001

188

110915

14

117460

8

118077

1

118612

3

119438

47

121259

2

121415

4

121584 ✓

59

121723

50

NAS1611-013

Purchased

No

260

Each

119.0000

4

4

NAS1611-013

O-RING

**

4

(2P)

12/06/07

Location

Loc Qty

Loc Code

FP001

119

116582

5

117291

2

117887

53

119623

36

121584

23

121825 ✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

May-14-12 1:09:01 PM

Work Order ID: 84482

84482

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 14/05/2012

Required Date: 23/05/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C4A Purchased No

280 Each 1,969.000 8

AN3C4A
BOLT

**

Location

Loc Qty

Loc Code

ST350

1969

120187

63

120521

28

120769

38

121205

1000

121556

840

AN960C10L NAS1149C0332 Purchased No

280 Each 0.0000 8 8

*AN960C10I *

**

washer

D3512-1

Manufactured No

280 Each 23.0000 2 2

D3512-1

**

Wearplate

Location

Loc Qty

Loc Code

ST500

1

74735

1

ST501

22

81352

4

83343

18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 84482 MLC
12/05/14

Qty	Part Number	Description
X	D3507-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2965	CAP
1	D2965-3	CAP
4	D3492-041	PLUG ASSEMBLY
4	D3492-043	PLUG ASSEMBLY
2	D3492-047	PLUG ASSEMBLY
2	D3504-1	CROSS BOLT SPACER
1	D3504-3	CROSS BOLT SPACER
2	D3504-5	CROSS BOLT SPACER
1	D3505-1	WEB
4	D3506-1	DOUBLER
2	D3506-3	DOUBLER
1	D3508-1	WEARPLATE
1	D3508-3	WEARPLATE
1	D3508-5	WEARPLATE
1	D3508-7	WEARPLATE
1	D3558-1	GASKET
1	D3558-3	GASKET
1	D3558-5	GASKET
1	D3558-7	GASKET
38	AELS-1032-130	INSERT
1	AELS-1032-225	INSERT
31	AN3C4A	BOLT
2	AN3C5A	BOLT
2	AN526C1032-10	SCREW
33	AN960C10L	WASHER
12	MS20601AD4W3	RIVET

GENERAL NOTES:

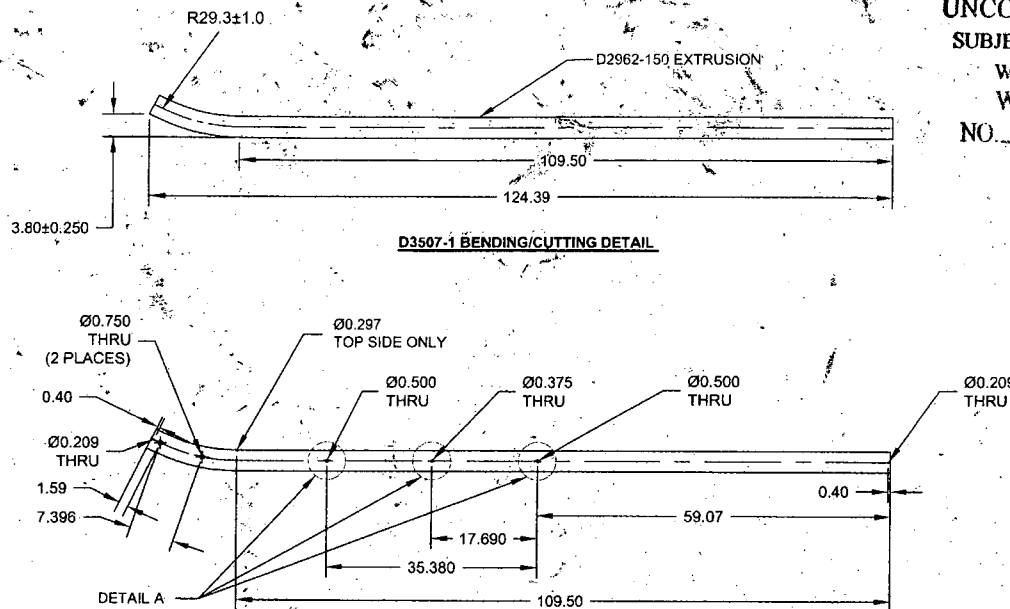
- FINISH:
CHEMICAL CONVERSION COAT PER DART QSI-005 4.1 PRIOR TO INSERTING D3505-1 WEB. POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3. ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER-LINE PER DART QSI 005 4.4
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- DIMENSIONS: INCHES UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004
- INSERT D3505-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING
- USE DART DRILL TEMPLATE DT8868 TO LOCATE AND DRILL Ø0.297 HOLES (38 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION C-C (38 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS

C	ADD D3504-5, FOR SKID GEAR DEFLECTOR; CHANGE FWD CAP BOLT TO AN526C1032-10 SCREW	DC	07.09.19
B	ADD GASKET, CHANGE HARDWARE MAT'L	PH	06.11.01
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	JIC		
CHECKED	PH		
MFG. APPR.	BP		
APPROVED	BP		
DE APPR.	BP		
DATE	07.09.19		

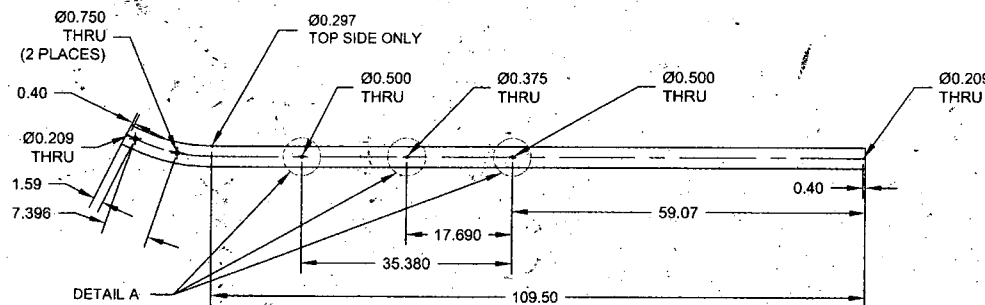
DART AEROSPACE USA, INC
PORT HADLOCK, WA

DRAWING NO. D3507
REV. C
SHEET 1 OF 2
TITLE EC 135 SKIDTUBE
SCALE
NTS

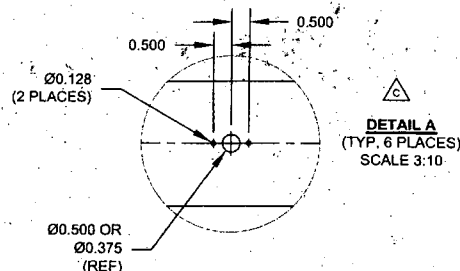
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D3507-1 BENDING/CUTTING DETAIL



D3507-1 DRILLING DETAIL



DETAIL A
(TYP. 6 PLACES)
SCALE 3:10

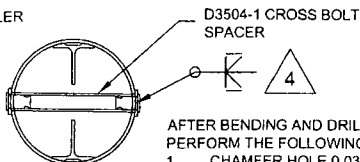
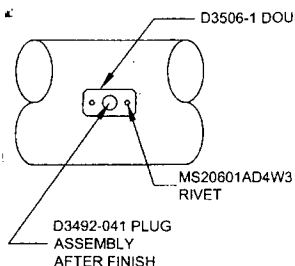
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

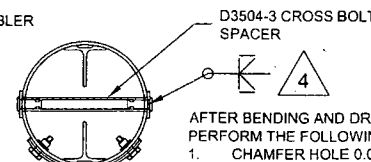
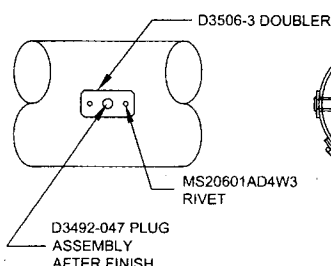
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



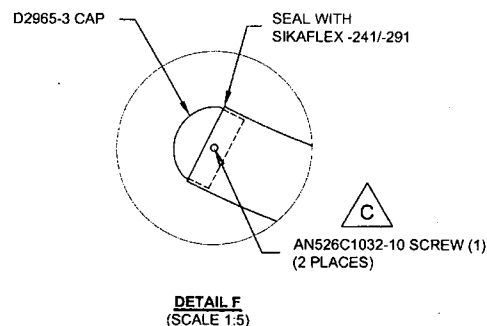
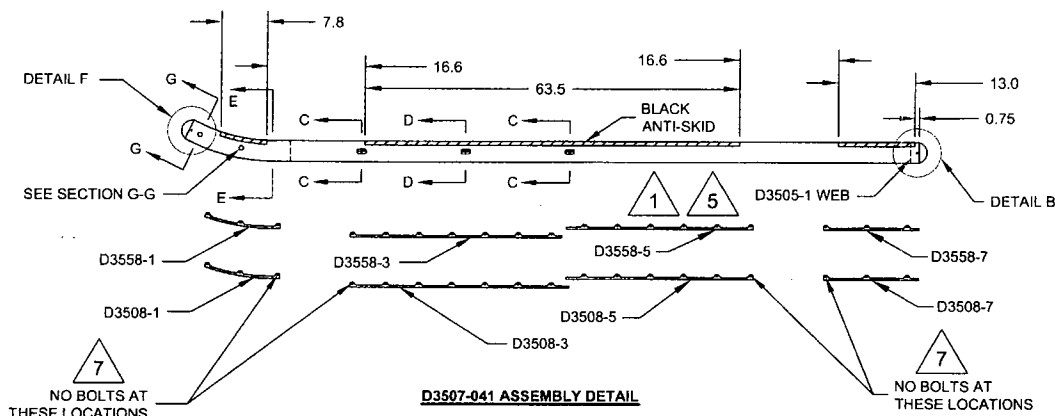
SECTION C-C
(SCALE 3:10)

- AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.500 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3504-1 CROSS BOLT SPACER (2 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. IF REQUIRED, PASS Ø0.404 (1/8" DRILL) THRU HOLE
 5. INSTALL D3506-1 DOUBLER (4 PLACES) USING MS20601AD4W3 RIVET (8 PLACES)
 6. AFTER FINISH, INSTALL D3492-041 PLUG ASSEMBLY (4 PLACES)

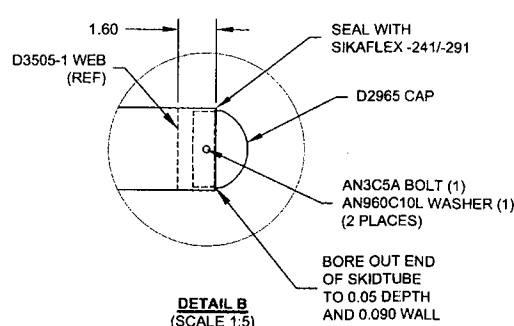


SECTION D-D
(SCALE 3:10)

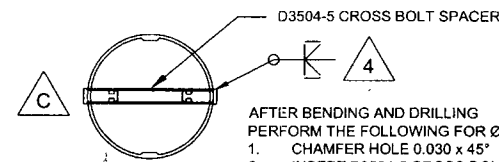
- AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3504-3 CROSS BOLT SPACER (1 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. IF REQUIRED, PASS Ø0.277 (1/8" DRILL) THRU HOLE
 5. INSTALL D3506-3 DOUBLER (2 PLACES) USING MS20601AD4W3 RIVET (4 PLACES)
 6. AFTER FINISH, INSTALL D3492-047 PLUG ASSEMBLY (2 PLACES)



DETAIL F
(SCALE 1:5)

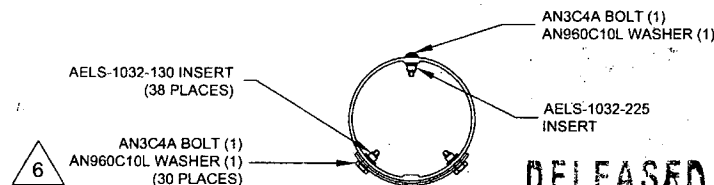


DETAIL B
(SCALE 1:5)



SECTION G-G
(SCALE 3:10)

- AFTER BENDING AND DRILLING
PERFORM THE FOLLOWING FOR Ø0.750 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3504-5 CROSS BOLT SPACER (2 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. IF REQUIRED, PASS Ø0.594 (19/32 DRILL) THRU HOLE
 5. AFTER FINISH, INSTALL D3492-043 PLUG ASSEMBLY (4 PLACES)



SECTION E-E
(SCALE 3:10)

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	SC	DRAWING NO.	REV. C
MFG. APPR.	SC	D3507	SHEET 2 OF 2
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	EC 135 SKIDTUBE	1:20
DATE	07.09.19	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
67-11-18-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 247

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job number: 66661
Part number: D135-751-011
Description: 135 SKID TIRE
Welding Process: Tig[☒] Mig[]
Base material: Aluminum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier: Pat Jones Date of Test Coupon 11/03/17
Welder: Barclay Elliot Date of Test Coupon 11/03/17

The above named individual is qualified in accordance with AWS D17.1.2001 to weld